

A Non-Contact Measurement System for Large Airfoils

Abstract of Disclosure

A non-contact measurement system employing a non-contact optical sensor and an edge detection sensor with a positioning system for moving the sensors over the surface and edges of a part (A) held in a predetermined, fixed position. The part is aligned in a co-ordinate system for obtaining accurate measurements of the part's surface (S) and edges (E). For parts smaller than the optical sensor's field of view, the part is rotated about an axis so both sides of the part are viewed by the sensor. If required, the part can also be shifted linearly along a horizontal axis (X) parallel to the sensor. For parts larger in size than the sensor's field of view, the part is moved along a vertical axis (Y) in predetermined segments so all of the part is exposed to viewing by the sensor.



Figures